

REMARKS/ARGUMENTS

Claims 1-19 are pending and rejected. By this paper, the Specification, Abstract, and claims 6, 12 and 14 are amended.

Abstract

The Abstract of the disclosure is objected to because it exceeds 150 words and goes into detailed description of the invention. The Abstract has been amended to reduce the number of words to 150 or less and to simplify the description of the invention in compliance with the Examiner's comments.

Specification

Paragraphs 5, 7, 11, 18 and 33 are objected to for various informalities. Paragraphs 5, 7, 11, 18 and 33 have been amended to correct the noted informalities.

35 U.S.C. §112

Claims 6, 12, 14 and 15 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6, 12 and 14 have been amended to provide proper antecedent basis for all terms as required.

35 U.S.C. §102

Claim 1 is rejected under 35 U.S.C. §102(b) as being anticipated by Schmidt-Marloh et al. (U.S. Pat. 5,738,503).

Claim 1 is directed to a method to manufacture an electrically driven air pump (10), in particular a method to manufacture a secondary air pump (10) for a motor vehicle with an internal combustion engine, wherein the air pump (10) features a housing (12), in which a pump mechanism (13) with at least one fan wheel (36, 38) as well as an electric motor (16) driving the at least one fan wheel (36, 38) are arranged. The air pump (10) is counterbalanced with the

electric motor (16) *built into* the housing (12) via balancing in at least two planes (A, B) that are spaced apart axially.

The claimed invention permits imbalances, which may be first yielded by installing the electric motor in the housing, to be eliminated to a large extent via the resulting complete balancing.

Marloh does not disclose counterbalancing the air blower unit 1 with the electric motor 36 built into the housing 100. Rather, "for the purpose of balancing, the air blower unit 1, which, with the exception of the housing 100, is completely mounted, is inserted into the balancing device 2 at the attachment eyelets 38 and secured". (Emphasis added). See Col 6, lines 7 to 10. Therefore, the electric motor 36 is not "built into" the housing 100 during the process of balancing as is recited in claim 1. Presumably, the housing 100 is installed after the balancing is completed using the balancing device 2. The written description of the Marloh method corresponds to Fig. 1, in which the air blower unit 1 is attached to the balancing device 2 for balancing, but the housing 100 is not present. In contrast, in Figs. 2 and 3, in which balancing has already taken place by, for example, placing balls 181 into groove 180, the housing 100 is depicted.

The method of balancing an air blower described by Marloh therefore lacks the benefit of the claimed invention, which is the ability to eliminate imbalances, which may be first yielded by installing the electric motor in the housing, via the resulting complete balancing.

For at least this reason, Marloh fails to teach or suggest all of the elements of claim 1. Reconsideration and withdrawal of the rejection is respectfully requested.

35 U.S.C. §103

Claim 7 is rejected under 35 U.S.C. §103(a) as being unpatentable over Marloh as applied to claim 1, and further in view of Van De Venne et al. (U.S. Pat. 5,711,652).

According to the Office action, it would have been obvious at the time the invention was made to modify the electrically driven air pump disclosed by Marloh to include a cover on the fan wheel side and a cover on the motor side as disclosed by Van De Venne.

Claim 7 depends from claim 1 and includes all of the elements of claim 1. For at least the same reasons as discussed above with respect to claim 1, Marloh fails to teach or suggest all of

the elements of claim 1, and thus of claim 7, alone or in combination with Van De Venne. For this reason, reconsideration and withdrawal of the rejection is respectfully requested.

In addition, the Applicant respectfully asserts that a person skilled in the art would not combine Marloh and Van De Venne in order to obtain the invention of claim 7. This is because Marloh balances in the compensation plane 22 by inserting balls 181 into a circumferential groove 180 of annular permanent magnet 18 of the rotor 5. This balancing is only possible if the groove 180 is accessible for insertion of the balls 181, i.e., if there is no cover surrounding the motor. Therefore, one of skill in the art would not modify the Marloh method by placing covers around the motor as described in Van De Venne.

Furthermore, even if the Marloh reference was modified to include a cover as described in the Van De Venne reference, all of the elements of claim 7 still would not be disclosed. This is because the circumferential groove 180 of Marloh would be covered by the elastomer ring 21 of Van De Venne so that a counterbalancing in the second compensation plane 22 of Marloh could only be achieved by using a balancing plate that is located outside of the motor base body 35. This is different from the claimed method, in which the air pump (10) is counterbalanced with the electric motor (16) built into the housing (12) via balancing in at least two planes (A, B) that are spaced apart axially.

Thus, neither Marloh nor Van De Venne, alone or in combination, teaches or suggests all of the elements of claim 7. Reconsideration and withdrawal of the rejection is respectfully requested.

Claims 2-4 are rejected under 35 U.S.C. §103(a) as being unpatentable over Marloh as applied to claim 1, and further in view of Nakanura et al. (U.S. Pat. 5,235,228).

Claim 2-4 depend from claim 1 and include all of the elements of claim 1. For at least the same reasons as discussed above with respect to claim 1, Marloh fails to teach or suggest all of the elements of claim 1, and thus of claims 2-4, alone or in combination with Nakanura. For this reason, reconsideration and withdrawal of the rejection is respectfully requested.

Nakanura describes a motor that can be balanced within its housing 18. However, a person skilled in the art would not combine the teachings of the Marloh reference with the Nakanura reference because Nakanura does not show or even suggest an electrically driven air

pump featuring a housing, in which a pump mechanism with at least one fan wheel is arranged. For this reason, reconsideration and withdrawal of the rejection is respectfully requested.

Claims 5, 6 and 8-19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Marloh in view of Nakanura and further in view of Van De Venne.

Claims 5, 6 and 8-19 depend from claim 1 and include all of the elements of claim 1. For at least the same reasons as discussed above with respect to claim 1, Marloh fails to teach or suggest all of the elements of claim 1, and thus of claims 5, 6 and 8-19, alone or in combination with Nakanura and Van De Venne. For this reason, reconsideration and withdrawal of the rejection is respectfully requested.

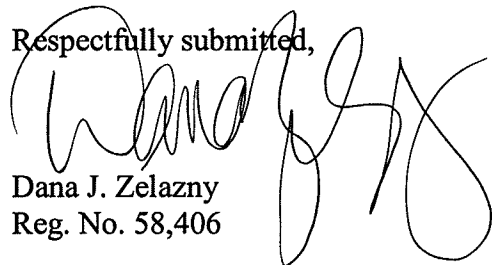
In addition, with regard to claim 8, the question arises, why would a person skilled in the art replace the circumferential ring 180 of the magnet 18 of rotor 5 in Marloh with the disk-like member 22R of Nakanura as well as why and where would a person skilled in the art add the elastomeric rings 18 and 21 of Van De Venne between the base body 35 and the housing 100 of Marloh. The modification of the Marloh device according to the teachings of Nakanura and Van De Venne as suggested by the Examiner can only be arrived at through impermissible hindsight in light of the teachings of Applicant's own specification. One of skill in the art, on the date of filing, would not have been motivated to combine the references as suggested by the Examiner. For at least these reasons, reconsideration and withdrawal of the rejection is respectfully requested.

Furthermore, with regard to claim 17, the Office action states that Van De Venne shows a sealing lip, which is embodied on the elastomer ring on the fan wheel side at the position marked 19. *See* Fig. 1. In fact, however, element 19 does not mark a position for a sealing lip but rather describes a recess in a housing wall 20 separating the first and second sections of the housing. *See* Col. 2, lines 45-49. Since a recess in structure and function is totally different from a sealing lip, Van De Venne fails to teach or suggest a sealing lip as recited in claim 17. Therefore, neither Marloh, Nakanura nor Van De Venne, alone or in combination, teaches all of the elements of claim 17. Reconsideration and withdrawal of the rejection is respectfully requested.

CONCLUSION

Entry of this paper and allowance of the claims is respectfully requested. The Examiner is invited to contact the undersigned with any questions or suggestions.

Respectfully submitted,


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